

Appl. No. 09/922,948
Supp. Amdt. dated Oct. 1, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

The following is a listing of the claims in accordance with the requirements of the PTO. Please amend the claims as shown.

1. (Currently Amended) A hardening protection composition in the form of a paste, semi-liquid or liquid for partial carburization of a metallic component, comprising a substance which forms boron glass and a magnesium-silicon compound, wherein the substance which forms boron glass and the magnesium-silicon compound are present in a weight ratio of 2:1 to 100:1, and the magnesium-silicon compound is a member selected from the group consisting of magnesium orthosilicate (Mg_2SiO_4), magnesium metasilicate ($MgSiO_3$), and magnesium trisilicate ($Mg_2Si_3O_8$).

2. (Cancelled).

3. (Original) The hardening protection composition according to claim 1 wherein the substance which forms boron glass and the magnesium-silicon compound are present in a weight ratio of 5:1 to 15:1.

4. (Cancelled).

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5. (Original) The hardening protection composition according to claim 1 wherein the substance which forms boron glass and the magnesium-silicon compound are present in a weight ratio of 10:1.

6. (Cancelled).

7. (Cancelled)

8. (Original) The hardening protection composition according to claim 1 wherein the magnesium-silicon compound is magnesium trisilicate.

9. (Previously Presented) The hardening protection composition according to claim 1 wherein the substance that forms boron glass is boric acid, boron oxide, alkali metal and/or alkaline earth metal borates.

10. (Cancelled).

11. (Original) The hardening protection composition according to claim 9, comprising based on the total amount, 40-55 wt.% boron oxide, 3-6 wt.% magnesium trisilicate and 39-57 wt.% of an organic binder.

12. (Original) The hardening protection composition according to claim 11, comprising, based on the total amount, 45 wt.% boron oxide, 5 wt.% magnesium trisilicate and 50 wt.% of an organic binder.

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13. (Currently Amended) The hardening protection composition according to claim [[10]] 1, comprising, based on the total amount, 45 wt.% boron oxide, 5 wt.% magnesium trisilicate and 50 wt.% of an organic binder.

14. (Currently Amended) A method for surface hardening of metal surface comprising applying to at least a portion of said surface a composition comprising a substance in the form of a paste, semi-liquid or liquid which forms boron glass and a magnesium-silicon compound in a weight ratio of 2:1 to 100:1, and thereafter subjecting said surface to a surface hardening treatment, and the magnesium-silicon compound is a member selected from the group consisting of magnesium orthosilicate (Mg_2SiO_4), magnesium metasilicate (MgSiO_3), and magnesium trisilicate ($\text{Mg}_2\text{Si}_3\text{O}_8$).

15. (Original) The method according to claim 14 wherein said surface hardening treatment is carburization at 900-980 °C.

16. (Original) The method according to claim 14 further comprising there being present in said composition an organic binder.

17.-18. (Cancelled).

19. (Currently Amended) A hardening protection composition in the form of a paste, semi-liquid or liquid for partial carburization of a metallic component, comprising a substance which forms boron glass and a magnesium-silicon compound, wherein the substance which forms boron glass and the magnesium-silicate compound are present in a weight ratio of

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2:1 to 100:1, said magnesium silicate compound is selected from the group consisting of magnesium orthosilicate (Mg_2SiO_4), magnesium metasilicate (MgSiO_3), and magnesium trisilicate ($\text{Mg}_2\text{Si}_3\text{O}_8$) ~~and tale~~.

20. (Currently Amended) A method for surface hardening of metal surface comprising applying to at least a portion of said surface a composition comprising a substance in the form of a paste, semi-liquid or liquid which forms boron glass and a magnesium-silicate compound in a weight ratio of 2:1 to 100:1, and thereafter subjecting said surface to a surface hardening treatment in a low pressure carburization process, said magnesium silicate compound being selected from the group consisting of magnesium orthosilicate (Mg_2SiO_4), magnesium metasilicate (MgSiO_3), and magnesium trisilicate ($\text{Mg}_2\text{Si}_3\text{O}_8$) ~~and tale~~.

21. (Currently Amended) A hardening protection composition in the form of a paste, semi-liquid or liquid for partial carburization of a metallic component with reduced risk of run off and reduced vapor pressure, comprising a substance which forms boron glass and a magnesium-silicon compound, wherein the substance which forms boron glass and the magnesium-silicate compound are present in a weight ratio of 2:1 to 100:1, said magnesium silicate compound is selected from the group consisting of magnesium orthosilicate (Mg_2SiO_4), magnesium metasilicate (MgSiO_3), and magnesium trisilicate ($\text{Mg}_2\text{Si}_3\text{O}_8$) ~~and tale~~.

22. (Currently Amended) A method for surface hardening of metal surface by partial carburization comprising applying to at least a portion of said surface a composition comprising a substance in the form of a paste, semi-liquid or liquid which forms boron glass and a

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magnesium-silicate compound in a weight ratio of 2:1 to 100:1, and thereafter subjecting said surface to a surface hardening treatment in a low pressure carburization process, said magnesium silicate compound being selected from the group consisting of magnesium orthosilicate (Mg_2SiO_4), magnesium metasilicate (MgSiO_3), and magnesium trisilicate ($\text{Mg}_2\text{Si}_3\text{O}_8$) ~~and tale~~, whereby the risk of run off of the said substance and the vapour pressure can be reduced.

23. (Previously Presented) The method according to claim 22, where the partial carburization is vacuum carburization.

24. (Previously Presented) The method according to claim 22, which is carried out in a reduced pressure carburization plant.

25. (Previously Presented) The method according to claim 22 wherein the magnesium silicate is magnesium trisilicate.